

### **REMARKS**

The present application relates to hybrid maize plant and seed 39W54. Claims 1-32 are pending.

### **DEPOSIT ISSUES**

The Examiner begins the office action by reiterating the requirements for the statement of deposit in a specification.

With regard to deposit of Hybrid 39W54, Applicant wishes to note that:

- a) during the pendency of this application access to the invention will be afforded to the Commissioner upon request;
- b) all restrictions upon availability to the public will be irrevocably removed upon granting of the patent;
- c) the deposit will be maintained in a public depository for a period of thirty years, or five years after the last request for the enforceable life of the patent, whichever is longer;
- d) a test of the viability of the biological material at the time of deposit will be conducted (see 37 C.F.R. § 1.807); and
- e) the deposit will be replaced if it should ever become inviable.

Applicant wishes to state that the actual ATCC deposit will be delayed until the receipt of notice that the application is otherwise in condition for allowance. Once such notice is received, an ATCC deposit will be made, and the claims will be amended to recite the ATCC deposit number. In addition, Applicant submits that at least 2,500 seeds of Hybrid 39W54 will be deposited with the ATCC.

### **ISSUES UNDER 35 U.S.C. § 112 SECOND PARAGRAPH**

Claims 1-32 stand rejected under 35 U.S.C. § 112, second paragraph, "as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." The claims stand rejected for being "incomplete in the recitation of the limitation 'representative seed having been deposited under ATCC accession

number \_\_\_\_\_' as found in claims 1, 5 and 7 and in the claims that depend therefrom."

The Examiner states that "In the interest of compact prosecution Applicants may refrain from amending the claim until the time of the actual deposit as set forth in 37 CFR 1.801-1.809."

Applicant respectfully submits that a deposit will be delayed until notice of otherwise allowable claims as provided under 37 C.F.R. § 1.809. Once notice of allowable claims has been received by Applicant, a deposit will be made with the ATCC and the claims will be amended to recite the accession number.

### **ISSUES UNDER 35 U.S.C. § 112 FIRST PARAGRAPH**

Claims 16-19 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one of skill in the art to practice the invention. The Examiner asserts "the limitation of 'one or more genes transferred by backcrossing' fails to set the metes and bounds of the invention as the term does not carry with it any limitation as to the structural or physical properties of the genes."

Applicant has amended claim 16 to more clearly illustrate that the claim is the plant of claim 2 "further comprising" a gene transferred by backcrossing. Applicant also wishes to note the following respectful traverse of this rejection. As noted by the Examiner the specification supplies an extensive definition and description of genes of interest. (See generally pages 22-32 and pages 28-32 for an extensive list of potential transgenes.) As also noted by the Examiner, a person having skill in the art could insert a rDNA gene into a selected maize plant. The Examiner also states that the insertion of a single copy of a gene into a plant would produce a plant that is indistinguishable from its non-transformed plant. Applicant has defined these additional genes in the present application on page 22 line 32 through page 23 line 5 as follows:

With the advent of molecular biological techniques that have allowed the isolation and characterization of genes that encode specific protein products, scientists in the field of plant biology developed a strong interest in *engineering the genome of plants to contain and express foreign genes, or additional genes* (perhaps driven by different promoters) in order to alter the traits of a plant in a specific manner. *Such foreign, additional*

*and/or modified genes are referred to herein collectively as "transgenes". Over the last fifteen to twenty years several methods for producing transgenic plants have been developed, and the present invention, in particular embodiments, also relates to transgenic versions of the claimed hybrid 39W54.*

(emphasis added) The present application clearly describes and defines a gene to be transferred into a plant wherein the product of that gene is expressed. This expression will confer a new or improved trait into that plant. However, as the Examiner has noted this gene is but a tiny fraction of the entire genome. In other words, the plant of claim 16 is distinguishable from the prior art plants just as is hybrid 39W54 without the transgenes. Further, the plant of claim 8 also contains a trait(s) that is either improved or additional to the traits of the maize plant of claim 2. The 39W54-transgene plant still expresses the unique combination of traits of 39W54 without the transgenes with the exception of the traits expressed by the transgenes. The trivial modifications introduced by the transgenes to the unique invention of 39W54 are clearly supported and described in the present application.

It is noted that the Examiner next again reiterates the rejections to claims 1-32 under 35 U.S.C. Section 112 second paragraph for the blanks in claim 1, 5, and 7. As applicant has already addressed this issue no further comment will be made here.

### CONCLUSION

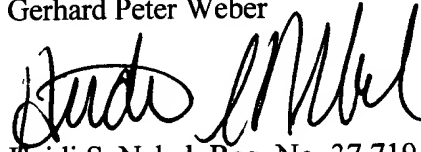
The Examiner notes that all claims are free of prior art in view of the combined characteristics of the hybrid plant and seed and that claims 1-32 are allowable if the Section 112 rejections are overcome. Applicant submits that, in light of the foregoing remarks, the claims, as amended, are in condition for allowance. The Examiner is invited to contact the undersigned at the number listed if this amendment does not result in allowable subject matter. Reconsideration and early notice of allowability are respectfully requested.

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

Reconsideration and allowance is respectfully requested.

Respectfully submitted,  
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Application No. 09/490,394

**AMENDMENT — VERSION WITH MARKINGS  
TO SHOW CHANGES MADE**

**In the Claims**

Claim 16 has been amended as follows:

16. (Amended)

A hybrid maize plant according to claim 2, wherein the genetic material of said plant  
[contains] further comprises one or more genes transferred by backcrossing.